## Timeline - Global Petroleum Industry

- **500 B.C.** First man-made oil well dug in Mesopotamia during the reign of Darius the Great.
- **600 A.D**. Confucius wrote about the wells drilled for salt in China that encountered oil and gas.
- **10th Century A.D.** Arabian traveler visits and describes Absheron's oil sources as a valuable article.
- **1273 A.D.** Marco Polo recorded visiting the Persian city of Baku, on the shores of the Caspian Sea, where he saw oil being collected from seeps for use in medicine and lighting and viewed the Eternal Fires..
- **16<sup>th</sup> Century A.D.** Oil from seeps in the Carpathian Mountains in Poland was burned in street lamps to provide light in the Polish town of Krosno.
- **1725** Peter the Great of Russia issues regulations to control the shipping of oil on the Volga River.
- **1781** Voynovich, chief of the Caspian expedition, finds the signs of oil and gas on the bottom of the Caspian Sea near the Absheron peninsula and charts a detailed map.
- **1803 -** Offshore oil extraction reported in Bibi-Heybat Bay of the Caspian Sea (Azerbaijan) from two hand-dug wells 18 and 30 meters away from the shoreline.
- **1816** Start of the US manufactured gas industry in Baltimore.
- **1825** First commercial natural gas production and use in Fredonia, New York well drilled to 27' and gas piped through hollow logs to adjacent houses.
- **1841** A Scottish chemist develops a process to extract hydrocarbon liquids from shale.
- **1855** First oil well in Indonesia at Toenggal.
- **1857** First drilling of oil wells at Bend on the Romanian side of the Carpathians.
- 1858 First oil well in North America at Oil Springs in Ontario, Canada.
- 1859 Colonel Drake drills his discovery well at Titusville, Pennsylvania, USA.
- **1860** First commercial oil production in Romania.
- **1861** First recorded shipping of oil between countries from Pennsylvania to London.
- **1869** Opening of the Suez Canal.
- 1870 Caddo Lake natural gas discovery in Texas-Louisiana, USA.

- **1876** First oil production in California from the San Fernando Valley.
- 1878 First oil drilling at Lake Maracaibo, Venezuela.
- **1883** Discovery of natural gas at Langevin Siding in what is now southeastern Alberta, Canada.
- 1885 Oil discovered on Sumatra, Indonesia.
- **1886** Launch of the first modern ocean-going oil tanker.
- 1890 Discovery of oil at Digboi, India.
- 1892 First oil exploration well in Australia.
- **1894** Discovery of the Midway-Sunset Oil Field in California, USA.
- **1895** Extraction of bitumen from bituminous sand using hot water at Carpenteria, California, USA.
- 1896 First offshore oil production from a pier at Summerland, California, USA.
- **1901** Spindletop gusher blew out on January 10, 1901 near Beaumont in East Texas, heralded the birth of the Texas oil industry.
- 1902 Discovery of oil at Waterton, Alberta (now part of the National Park), Canada.
- **1903** Wright Brothers first aircraft.
- 1905 Glenn Pool discovered, Oklahoma, USA.
- 1907 China initiates modern drilling for oil.
- 1907 Comodoro Rivadavia oil discovery, southern Argentina.
- **1907** First commercial oil discovery in Trinidad.
- 1908 Oil discovered in Iran.
- 1908 Henry Ford begins mass production of the Model "T" automobile.
- 1908 First major discoveries in the "Golden Lane Trend" of Mexico.
- **1908** First oil discovery in Egypt.
- **1909** Howard Hughes, Sr. invents the roller cone drilling bit that facilitates rotary drilling.
- **1910 -** First oil discovery in Mexico at Tampico on the Gulf Coast.

- **1912** Cushing Field discovered, Oklahoma, USA.
- **1913** Offshore drilling initiated from platform in shallow waters of Lake Erie in Canada.
- **1913** Catalytic Cracking patented for the enhanced production of gasoline from crude oil.
- 1914 Discovery of the Turner Valley Field, Alberta, Canada.
- 1914 Panama Canal opens.
- **1915** Production of natural gas from fractured shales begins in the Big Sandy Field, Kentucky, USA.
- 1916 Infanatas Field discovered, Columbia.
- 1916 Ventura Field discovered, California, USA.
- **1916** Tampico discoveries, Mexico.
- 1917 Oklahoma City Field discovered, Oklahoma, USA.
- **1917** First commercial production of LNG.
- 1918 Panhandle Field discovered, Texas, USA.
- 1920 Huntington Beach Field discovered, California, USA.
- 1920 Norman Wells Filed discovered, Northwest Territories, Canada.
- **1922** –Las Barrosos Field Discovery, Maracaibo, Venezuela. Well blows out at 100,000 bbl/d.
- 1926 Yates Field discovery, Texas, USA.
- **1927** Slant hole drilling at Huntington Beach, California taps offshore reserves.
- 1927 Discovery of the Kirkuk Field, Iraq.
- 1930 Discovery of the East Texas Field, Texas, USA.
- 1932 First oil discovery in Bahrain.
- **1932** Electric logging introduced for the evaluation of wells.
- **1932** Wilmington Field discovery, California, USA.
- **1933** The first submersible drilling barge was used in the estuaries (Lake Pelto) Louisiana, USA.

- 1936 Discovery of prolific oil production at Turner Valley, Alberta, Canada.
- **1937** Dieselization of railroad engines begins.
- 1938 Oil discovered in Kuwait (Bergan) and Saudi Arabia (Dammam).
- **1938** First freestanding offshore drilling operation, Creole Field, Louisiana, Gulf of Mexico, USA.
- 1939 Oil Discovery in Lachunmia Field, China.
- 1947 Oil discovery at Leduc, Alberta, Canada.
- 1947 First producing oil well on the Outer Continental Shelf off Louisiana, USA.
- **1948** Ghawar Field discovered in Saudi Arabia the largest conventional oil field in the world.
- **1949** First offshore oil drilling at Oil Rocks (Neft Dashlari) in the Caspian Sea off Azerbaijan.
- 1949 Oil Discovered in Algeria.
- **1953** Major crude oil pipelines from Alberta completed to Ontario (Interprovincial) and Vancouver (Trans-Mountain).
- 1953 Oil discovered in the United Arab Emirates (Murban).
- **1953** Oil discovered in Australia (Rough Range).
- **1955** First oil discovery in Angola.
- **1955** First commercial oil discovery in Nigeria.
- **1956** First offshore drillship.
- **1956** First offshore jack-up rig.
- 1956 Discovery of oil in Saharan Algeria.
- 1957 First Brazilian onshore oil discovery.
- **1958** Opening of the Trans-Canada natural gas pipeline from Alberta to Ontario.
- 1959 Natural gas discovered in Groningen Field, Netherlands.
- 1959 First commercial oil discovery in Libya.
- 1960 OPEC (Organization of Petroleum Exporting Countries) founded in Baghdad.

- **1962** First offshore semisubmersible drilling rig.
- **1962** First offshore subsea well completion.
- **1964** First international sale of LNG with Algeria supplying Great Britain and France.
- **1967** First commercial production of the largest oil resource in the world tar sands north of Fort McMurray, Alberta, Canada.
- 1968 Oil discovered on North Slope of Alaska at Prudhoe Bay, USA.
- **1969** Oil discovered in both U.K. and Norwegian sectors of the North Sea.
- **1969** Discovery of natural gas at the Drake Point Field, High Arctic of the Northwest Territories, Canada.
- **1971** First mobile offshore production unit.
- **1972** First well drilled from an offshore drillship without anchors.
- **1972** Discovery of oil in Tabasco and Chiapas States, Mexico.
- 1975 First oil production from the North Sea.
- 1977 First oil delivered to market from the North Slope of Alaska, USA.
- **1978** Cognac production platform, Gulf of Mexico, USA first in more than 1000 feet of water.
- **1979-1981** Oil prices rise from \$13.00 to \$34.00 per barrel.
- 1983 NYMEX opens crude oil futures trading.
- 1984 Discovery of the Amauligak Field, Beaufort Sea, Canada.
- **1986** Oil prices collapse.
- 1986 First massive hydraulic frac in a vertical well in the Barnett Shale, Texas, USA.
- 1991 First horizontal well in the Barnett Shale, Texas, USA.
- 1994 First sub-salt discovery on the Gulf of Mexico, USA.
- **1994** First production from a tension leg platform in the Auger Field, Gulf of Mexico, USA.
- 1996 First production from a spar, Gulf of Mexico (Neptune Field), USA.
- **1997** Qatar inaugurates the world's first significant liquid natural gas (LNG) exporting facility.

- 1997 First slick water frac in the Barnett Shale, Texas, USA.
- **1997** First oil production from the Hibernia Field, offshore Newfoundland and Labrador, Canada.
- **1999** Discovery of the Thunderhorse Field, Gulf of Mexico in more than 6000 feet of water.
- **1999** First production from deepwater Angola.
- **1999** First natural gas production from the Sable Island cluster of Fields, Offshore Nova Scotia, Canada.
- **2001** Installation of the Girassol FPSO, offshore Angola.
- **2005** Horizontal wells exceed vertical wells for the first time in the Barnett Shale, Texas, USA.
- 2005 (Aug. 29) Oil reaches \$70.80 US per barrel
- **2005** (Dec 13) Natural gas price hits a record high of \$15.65US/mmbtu in the United States.
- **2006 -** (July 13) Oil hits a record high of \$78.40 per barrel on New York Mercantile Exchange.
- **2007** (Mar.) European Union introduced new environmental regulations to reduce GHG emissions by 20% by 2020.
- **2007** Discovery of the offshore sub-salt play at the Tupi Field, Brazil.
- 2008 (July 11) Crude oil hits a record high over \$147.27 per barrel.
- 2008 (Nov. 20) Price of oil drops below \$50 per barrel.
- **2009 (Jan. 19)** Oil price falls to \$34 US per barrel.
- 2009 (Oct. 20) Oil above US\$80 per barrel.
- **2012** Qatar largest LNG exporter with 25% share of global markets.
- 2013 Production of natural gas from shales exceeds 40% of supply in the USA.